

CLAIMS:

1. (Currently Amended) A method of channel decoding speech frames in a receiver capable of multiple (M) codec modes, said channel encoded speech frames comprised of an inband bit portion and a speech portion, said method comprising:

- (a) decoding the inband bit portion of a received frame to obtain confidence levels associated with each of the M codec modes before a decoding error has been detected;
- (b) choosing the most likely codec mode based on the highest confidence level to channel decode the speech portion;
- (c) decoding the speech portion of the received frame using the chosen speech codec mode;
- (d) performing a frame determination check to determine the quality of the decoded speech frame; and
- (e) if the decoded speech frame is determined to be of poor quality, then choosing the next most likely codec mode corresponding to the next highest inband bit decoding confidence level and repeating steps (c) through (e).

2. (Previously Presented) The method of claim 1 wherein steps (c) through (e) are repeated for a maximum number of iterations (N), where N ≤ M.

3. (Previously Presented) The method of claim 1 wherein steps (c) through (e) are repeated so long as the confidence level for the inband bit decoding with respect to the current codec mode is above a threshold confidence level.

4. (Previously Presented) The method of claim 2 wherein the maximum number of iterations N is determined prior to choosing the most likely codec mode to decode the speech portion based on the highest confidence level.

5. (Previously Presented) The method of claim 4 wherein the maximum number of iterations (N) is set to the number of codec modes that exceed a threshold confidence level.

6. (Currently Amended) A method of channel decoding speech frames in a receiver capable of multiple (M) codec modes, said channel encoded speech frames comprised of an inband bit portion and a speech portion, said method comprising:

calculating a plurality of inband decode metrics, one for each speech codec mode before a decoding error has been detected;

partially decoding speech data for each speech codec mode;

determining the most likely speech codec mode based upon the partially decoded speech data and the calculated inband decode metric data; and

resuming decoding of the speech data using the most likely speech codec mode.

7. (Currently Amended) A receiver for channel decoding speech frames, said receiver capable of multiple (M) codec modes, said channel encoded speech frames comprised of an inband bit portion and a speech portion, said receiver comprising:

an inband bit decoder, for the inband bit decoder:

decoding the inband bit portion of a speech frame to obtain confidence levels associated with each of the M codec modes before a decoding error has been detected; and

choosing the most likely speech codec mode based on the highest confidence level to decode the speech portion; and

a channel decoder coupled with the inband bit decoder for:

decoding the speech portion of the received frame using the chosen codec mode;

performing a frame determination check to determine the quality of the decoded speech frame; and

if the decoded speech frame is determined to be of poor quality, then choosing the next most likely codec mode corresponding to the next highest inband bit decoding confidence level and running the channel decoder on the received frame again.

8. (Previously Presented) The receiver of claim 7 wherein the channel decoder is run for a maximum number of iterations (N), where  $N \leq M$ .

9. (Previously Presented) The receiver of claim 7 wherein the channel decoder is run so long as the confidence level for the inband bit decoding with respect to the current codec mode is above a threshold confidence level.

10. (Previously Presented) The receiver of claim 8 wherein the maximum number of iterations N is determined prior to the inband bit decoder choosing the most likely codec mode to decode the speech portion based on the highest confidence level.

11. (Previously Presented) The receiver of claim 10 wherein the maximum number of iterations (N) is set to the number of codec modes that exceed a threshold confidence level.

12. (Currently Amended) A receiver for channel decoding speech frames, said receiver capable of multiple (M) codec modes, said channel encoded speech frames comprised of an inband bit portion and a speech portion, said receiver comprising:

an inband bit decoder, for the inband bit decoder;

calculating a plurality of inband decode metrics, one for each codec mode before a decoding error has been detected; and

a channel decoder for:

partially decoding speech data for each codec mode;

determining the most likely codec mode based upon the partially decoded speech data and the calculated inband decode metric data; and resuming decoding of the speech data using the most likely codec mode.